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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/758,157

01/15/2004

James F. Popelka

PP06385US00

4846

22885 7590 11/20/2007
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SUITE 3200
DES MOINES, IA 50309-2721

EXAMINER

WAGGONER, TIMOTHY R

ART UNIT

PAPER NUMBER

3651

MAIL DATE

DELIVERY MODE

11/20/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/758,157

Applicant(s)

POPELKA, JAMES F.

Examiner

Timothy R. Waggoner

Art Unit

3651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>09/28/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-52 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed with respect to all independent claims have been fully considered but they are not persuasive. Applicant argues that the system as described by Whitten does not disclose monitoring all detectors for each emitter. However even with the limitations given in Whitten if there are only two sets of emitters and detectors then all the detectors would be monitored during operation. Furthermore even if there were more than two sets of emitters and detectors it is merely a change in scale to have the device of Whitten to monitor more detectors than those immediately adjacent. For at least the forgoing reasons claims 1-52 stand rejected.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20-24,27-29 and 40-52 directed to the apparatus and claims 1-19 and 30-39 directed to the method of using the apparatus are rejected under 35 U.S.C. 103(a) as being unpatentable over Whitten et al USPN 6,732,014 in view of Balch USPN 5,113,130.

Whitten discloses a detector for vended items comprising:

(Re claim 20) "a first support upon which is mounted a set of optical emitters" (310A figure 3A). "a second support member upon which is mounted a set of optical detectors" (350B figure 3B). "a controller operatively connected to each emitter and detector" (335A, 325A, 365B figure 3A,B). "an interface adapted for communication of the output signal" (325A, 365B figures 3A,B).

(Re claim 21) "the first and second support members comprise a circuit board" (360B figure 3B).

(Re claim 22) "perimeter dimensions that do not exceed several inches by one-half foot" (figure 7).

(Re claim 23) "there are five emitters" (720 figure 7).

(Re claim 24) "there are five detectors" (725 figure 7).

(Re claim 27) "controllers is a microprocessor" (325A and 365B figure 3A,B).

(Re claim 28) "output signal is communicated to a interface to a master controller board of a vending machine" (130 and 150 figure 1).

(Re claim 29) "a vending machine" (205 figure 2).

(Re claim 40) "a set of several emitters spaced apart on one side of a vend area" (242 figure 2). "a set of several detectors spaced apart on another side of the vend area" (252 figure 2). "a microprocessor operatively connected to each emitter and detector" (235 figure 2). "a program ... monitoring for a vend" (figure 1).

(Re claim 41) "a timer to time on and off of the emitters" (325A, 375B figure 3A,B; processors control the timing and of all processes).

(Re claim 42) "a timer to time on and off of the emitters" (325A,375B figure 3A,B; processors control the timing and of all processes).

(Re claim 43) "a modulator to modulate the electromagnetic energy of the emitters" (325A,375B figure 3A,B; processors control emitters levels keeping them in the infrared band).

(Re claim 44) "signal is adapted for communication to a vending machine" (130,150 figure 1).

(Re claim 45) "signal is adapted for communication to a master controleler board of a vending machine" (130,150 figure 1).

(Re claim 46) "the signal turns a transistor on or off" (the signal from Whitten is capable of this).

(Re claim 47) "the signal operates a relay" (the signal from Whitten is capable of this).

(Re claim 48) "with a vending machine" (205 figure 2).

(Re claim 49) "vending machine is a snack vending machine with multiple rows and columns" (205 figure 2).

(Re claim 50) "a dispensing area" (222 figure 2). "a master controller controlling dispensation of vendible products" (220 figure 2). "a set of several emitters on one side of the vend area" (242 figure 2). "a set of several optical detectors on another side of the vend area" (252 figure 2). "a microprocessor operatively connected to each emitter and detector" (235 figure 2). "a program ... monitoring for a vend" (figure 1).

(Re claim 51) "initialization of on and off times for the emitters" (106 figure 1).

(Re claim 52) "initialization of on time for the generated signal" (130 figure 1).

Whitten does not disclose that the detectors are monitored while all emitters are off to see if there is a false positive and if so report the error.

Balch teaches turning off the emitter and monitoring the detector for false positives and reporting this error.

It would be obvious to one skilled in the art to modify the system of Whitten to include the step of monitoring for false positives while all emitters are off because it improves reliability.

(Re claims 1-19 and 30-39) These claims are all directed to a method of use of the apparatus as indicated by applicant's representative. Whitten/Balch anticipates all the limitations of the apparatus as claimed and therefore would be capable of performing the methods as claimed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy R. Waggoner whose telephone number is (571) 272-8204. The examiner can normally be reached on Mon-Thu 8am-2pm.

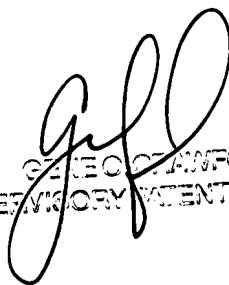
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/758,157
Art Unit: 3651

Page 6

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TRW


GENE C. SANFORD
SUPERVISORY PATENT EXAMINER